ELSEVIER

Available online at www.sciencedirect.com

SCIENCE DIRECT®

Geoderma 126 (2005) 401–402

GEODERMA

www.elsevier.com/locate/geoderma

Contents Volume 126, 2005

Special Issue

Deep regolith: exploring the lower reaches of soil

Edited by

C.W. Zanner and R.C. Graham

Editorial

Deep regolith: exploring the lower reaches of soil
C.W. Zanner and R.C. Graham 1

Regular papers

Elemental translocation and loss from three highly weathered soil–bedrock profiles in the southeastern United States
N.-H. Oh and D.D. Richter 5

Hydrogeology and pedology of saprolite formed from sedimentary rock, eastern Tennessee, USA
L.D. McKay, S.G. Driese, K.H. Smith and M.J. Vepraskas 27

Predicting contaminant transport along quartz veins above the water table in a mica-schist saprolite
M.J. Vepraskas 47

Groundwater geochemistry and composition of hardpans in southwestern Australian regolith
S.Y. Lee and R.J. Gilkes 59

Paleosols as deep regolith: implications for ground-water recharge across a loessial climosequence
A.T. O'Geen, P.A. McDaniel, J. Boll and C.K. Keller 85

Estimating the depth to sulfide-bearing materials in Upper Cretaceous sediments in landforms of the Maryland coastal plain
M.C. Rabenhorst and T.M. Valladares 101

Hydrology of soils and deep regolith: a nexus between soil geography, ecosystems and land management
P.J. Schoeneberger and D.A. Wysocki 117

Mapping the global distribution of deep roots in relation to climate and soil characteristics
H.J. Schenk and R.B. Jackson 129

Ectomycorrhizae in a soil-weathered granitic bedrock regolith: linking matrix resources to plants
M.A. Bornyasz, R.C. Graham and M.F. Allen 141

Problems arising from fixed-depth assessment of deeply weathered sandy soils
W.G. Harris, S.H. Crownover and J. Hinchee 161

Soil surveys: a window to the subsurface
D.A. Wysocki, P.J. Schoeneberger and H.E. LaGarry 167

Vertical variation of near-saturated hydraulic conductivity in three soil profiles
Y. Coquet, P. Vachier and C. Labat 181

Near infrared reflectance spectroscopy for assessment of spatial soil variation in an agricultural field
M. Odlare, K. Svensson and M. Pell 193

Strontium isotope composition as a tracer of calcium sources in two forest ecosystems in Belgium
Th. Drouet, J. Herbauts, W. Gruber and D. Demaiffe 203

Lateritic crusts and related soils in eastern Brazilian Amazonia
A.M.C. Horbe and M.L. da Costa 225

Recent vegetation changes in central Queensland, Australia: Evidence from $\delta^{13}C$ and ^{14}C analyses of soil organic matter
E.S. Krull, J.O. Skjemstad, W.H. Burrows, S.G. Bray, J.G. Wynn, R. Bol, L. Spouncer and B. Harms 241
Variation in penetrometer resistance with soil properties: the contribution of effective stress and implications for pedotransfer functions
J. To and B.D. Kay 261
Estimating soil hydraulic properties and their uncertainty: the use of stochastic simulation in the inverse modelling of the evaporation method
B. Minasny and D.J. Field 277
The effect of UV and visible light radiation on natural humic acid. EPR spectral and kinetic studies
K. Polewski, D. Sławińska, J. Sławiński and A. Pawlak 291
Soil nutrient distributions of mesquite-dominated desert grasslands: changes in time and space
T.B. Wilson and T.L. Thompson 301
Variability of soil water repellency in sandy forest soils with different stand structure under Scots pine (*Pinus sylvestris*) and beech (*Fagus sylvatica*)
U. Buczko, O. Bens and R.F. Hüttl 317
Geochemical barriers and element retention in soils in different landscapes of the Tianshan Mountain area, Xinjiang, China
B. Huang and Z. Gong 337
Base cation and silicon biogeochemistry under pine and scrub oak monocultures: implications for weathering rates
J.L. Johnson-Maynard, R.C. Graham, P.J. Shouse and S.A. Quideau 353
Characterization and acid–base properties of fulvic and humic acids isolated from two horizons of an ombrotrophic peat bog
D. Gondar, R. Lopez, S. Fiol, J.M. Antelo and F. Arce 367
Chemical and electrochemical properties of an Oxisol–Ultisol transition in the state of São Paulo, Brazil
A.R. Coscione, A.C. Moniz, D.V. Pérez, M.M.C. Ferreira and O.A. Camargo. 375
Application of cosmogenic ^{10}Be to dating soils on the raised coral reef terraces of Kikai Island, southwest Japan
Y. Maejima, H. Matsuzaki and T. Higashi 389

Contents Volume 126, 2005. 401